|  |  |  |
| --- | --- | --- |
|  | *2-way ANOVA**(time x treatment)* | *Sidak’s multiple comparisons test* |
| *Time* | *Treatment* |
| *PL* | *KE* | *PL+KE* |
| *p-AktSer473* | Interaction: 0.9168Time: <0.0001Treatment: 0.2738 | 0 Vs. -80: 0.06490 Vs. 90: 0.00150 Vs. 300: 0.0017 | 0 Vs. -80: 0.17910 Vs. 90: 0.01650 Vs. 300: 0.0223 | 0 Vs. -80: 0.01530 Vs. 90: <0.00010 Vs. 300: <0.0001 | -80 (PL Vs. KE): 0.98140 (PL Vs. KE): >0.999990 (PL Vs. KE): 0.8846300 (PL Vs. KE): 0.8395 |
| *4E-BP1%γ* | Interaction: 0.0002Time: <0.0001Treatment: 0.0472 | 0 Vs. -80: <0.00010 Vs. 90: 0.81840 Vs. 300: <0.0001 | 0 Vs. -80: <0.00010 Vs. 90: 0.04250 Vs. 300: <0.0001 | 0 Vs. -80: <0.00010 Vs. 90: 0.06690 Vs. 300: <0.0001 | -80 (PL Vs. KE): 0.01700 (PL Vs. KE): >0.999990 (PL Vs. KE): 0.7713300 (PL Vs. KE): 0.0027 |
| *p-S6K1Thr389* | Interaction: 0.0033Time: <0.0001Treatment: 0.0182 | 0 Vs. -80: 0.99990 Vs. 90: 0.49630 Vs. 300: 0.0124 | 0 Vs. -80: 0.95610 Vs. 90: 0.08600 Vs. 300: <0.0001 | 0 Vs. -80: 0.97640 Vs. 90: 0.04850 Vs. 300: <0.0001 | -80 (PL Vs. KE): 0.99230 (PL Vs. KE): >0.999990 (PL Vs. KE): 0.8288300 (PL Vs. KE): <0.0001 |
| *p-AMPKThr172* | Interaction: 0.1029Time: 0.0064Treatment: 0.2261 | 0 Vs. -80: 0.24800 Vs. 90: 0.97860 Vs. 300: 0.0498 | 0 Vs. -80: 0.17890 Vs. 90: 0.02880 Vs. 300: 0.0327 | 0 Vs. -80: 0.04150 Vs. 90: 0.27550 Vs. 300: 0.0024 | -80 (PL Vs. KE): 0.99970 (PL Vs. KE): >0.999990 (PL Vs. KE): 0.0281300 (PL Vs. KE): 0.9997 |
| *Muscle glycogen* | Interaction: 0.8560Time: <0.0001Treatment: 0.6465 | 0 Vs. -80: <0.00010 Vs. 90: 0.54930 Vs. 300: 0.0002 | 0 Vs. -80: <0.00010 Vs. 90: 0.91020 Vs. 300: <0.0001 | 0 Vs. -80: <0.00010 Vs. 90: 0.50410 Vs. 300: <0.0001 | -80 (PL Vs. KE): 0.99970 (PL Vs. KE): 0.987790 (PL Vs. KE): 0.8734300 (PL Vs. KE): >0.9999 |

*Supplementary Table 1. Additional statistical information In vivo experiments.*

Data are p-values for two- way repeated-measures analysis of variance (ANOVA) and Sidak’s multiple comparisons test as calculated using GraphPad Prism 7.0, La Jolla California, USA. Abbreviations: PL, placebo; KE, ketone ester; KE, ketone ester (R)-3-hydroxybutyl (R)-3-hydroxybutyrate; ANOVA, analysis of variance.